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# Descriptive Catalogue

**SEASON 1917-18** 

# Loma Rica Nursery

Pear Specialists



GRASS VALLEY, CALIFORNIA

A. L. WISKER

Manager

Winners against the competition of the world of the highest award (Medal of Honor) at Panama-Pacific International Exposition, San Francisco, 1915, on Collective Exhibit of Pears (48 varieties in our display).

## To the California Orchardist

We try to grow the best trees that money can buy, and if you have the slightest cause for complaint we will adjust it to your satisfaction, provided you notify us within five days after receiving the shipment and enclose a statement from your horticultural commissioner stating the ground for your complaint. If we have no notice to the contrary within the time stated, we shall consider that the order has been filled to your entire satisfaction. We make this rule, not to evade responsibility, but in order to have any complaints reach us promptly, when all the facts can be inquired into in a manner and at a time that will insure an adjustment that is absolutely fair to both parties.

In every planting season thousands of trees fail to grow. Many inexperionced orchardists—and a few who know better—are apt to excuse their own shortcomings or the carelessness of their hired help by placing the Where the true facts are arrived at blame at the door of the nurseryman. the nurseryman is seldom at fault.

The orchardists of the world saw our magnificent display of 48 varieties of pears in the Nevada County exhibit in the Palace of Horticulture at the Panama-Pacific Exposition. This display, which was awarded the Medal of Honor against the competition of the world—the highest award in its class-in one brief season made Loma Rica Nursery known to the orchardists of America as specialists in pears, while our dissemination of information repecting the super-adventages of growing this fruit on the blight-andaphis-resistant root-which we were first to exclusively adopt-has particularly served to commend our stock to the commercial pear planters. We trust that it may be our privilege to serve them acceptably, and to work with them toward the solution of all problems that confront the industry.

Our trees-grown in the mellow, red loam soil of the higher foothillsdevelop such a strong and abundant root system that many veteran orchardists declare them to be the best they have ever seen, while our packing system furnishes perfect protection to root and top alike.

## Grade Rules

It is the nature of certain kinds of trees to grow stocky, rather than tall. Almonds often make such growth, and other trees ocasionally. It is not practical, therefore, to always grade by height, and we reserve the right to grade such trees on the basis of caliper or diameter, as follows:

Trees that caliper  $\frac{1}{2}$  to  $\frac{5}{2}$  inch shall grade as 4 to 6 feet. Trees that caliper  $\frac{3}{2}$  to  $\frac{1}{2}$  inch shall grade as  $\frac{3}{2}$  to  $\frac{4}{2}$  feet. Trees that caliper  $\frac{1}{2}$  to  $\frac{3}{2}$  inch shall grade as 2 to 3 feet.

The diameter shall govern the grading only where height is not sufficient to admit trees to the respective grades, and all trees graded by caliper must have roots at least as good as average of trees admitted to same grade on height.

#### WHY YOUNG TREES FAIL.

newly-planted trees fail to grow are great safeguard. as follows:

1. Roots drying out, as a result of ly where land has been newly cleared some horticultural inspector's care- or lacking in moisture at time of lessness, or the carelessness of the planting. recipient at some point between the receiving station and the orchard the failure to tramp good, moist soil trees should be inspected without I'IRMLY about the roots and failure allowing the small roots to dry out; should be promptly taken from the station and "heeled in" in moist soil m such manner that all roots are kept moist and protected from frost until tions, such as drying winds or failure ready for planting, and should then of late rains. be planted in moist soil without the 5. Neglect after planting.

slightest exposure of the roots to wind or sun. Dipping the roots in principal reasons why thin mud when ready to plant is a

#### LOMA RICA NURSERY, GRASS VALLEY. CALIF.

season is a critical time with the young tree, since it must grow a new root system to take the place of the sery. During this time, soil moisture must be thoroughly maintained at all times and the soil kept loose and free from any growth for several in the locality under consideration. fect around the tree.

#### OUR PRICES.

Our prices are most reasonable when you consider QUALITY and the guarantee behind our stock, but we make no effort to match prices with numerous tree peddlers and Cheap-John nurserymen, who are the curse of California horticulture, are well; nor do we expect the patronage of those who fail to understand that High-Class Stock CANNOT be sold for the price of the common stock which starts many an orchardist on the road to failure from the day he buys his trees. Remember, poor trees always wells proportionally the property of the control of trees always make poor orchards, and good trees do, also, UNLESS RIGHT-LY CARED FOR.

#### GUARANTEE.

We guarantee every tree sold by us to be true to name, and agree-upon proper proof-should any prove untrue, to replace such tree with another of equal grade of the variety pur-chased, or to replace the same with other nursery stock of equal value at the customer's option, paying all transportation charges thereon, and also to refund to the purchaser the full amount originally paid us for such stock. We disclaim any greater liability and all our sales are made with this understanding.

#### NOMENCLATURE.

In the descriptions, where several names are given, that which the American Pomological Society accepts as correct is given first. It is desirable that nurserymen and orchardists) should unite in an effort to standardize the names of all fruits, accepting as authoritative the decisions of the American Pomological Society. The practice of selling nursery stoc under different names in different localities is a survival of the ignorance of earlier times, and should be abandoned.

## BEST VARIETIES.

Under each heading varieties are arranged in the order of ripening. A star (\*) indicates that the variety is of high quality or is commercially valuable.

#### APPLES.

The universal fruit. No family orroots lost on removal from the nur- chard complete without a few of the

> \*LIVLAND. Probably the most valuable early apple. Russian; medium to large; beautiful waxen-white, striped, shaded and marbled with beautiful waxen-white, light crimson; flesh white, some-times stained with red; fine, ten-der, pleasant, mild subacid; cooking and dessert; very good; hardy; blooms late; bears young and bears well; resistant to blight; superio: to Yellow Transparent and Red Astrachan.

ASTRACHAN. Well-known early apple. Russian; medium to large; attractive, greenish yellow, largely covered with light and darl crimson, overspread with bluish bloom; flesh white, often tinged with red, rather fine, tender, juicy, brisk subacid; cooking and dessert; good; hardy; bears young.

\*WILSON RED. Desirable summer apple. American; medium to large; unusually beautiful; dark red (solid color) where exposed to sun; flesh wery firm, moderately fine, juic mildly acid; cooking and dessert; good shipping apple; has sold or Kansas City markets for \$16 per

ish; large; attractive, greenish yellow, overlaid with broken stripes ( light and dark red; flesh yellowish, firm, moderately fine, crisp, fairl tender, juicy, sprightly subacid; cooking and dessert; very good to best; bears moderately young; fairly productive; fruit drops badly in some seasons; excellent shipper.

\*KING DAVID. One of the best fall apples. American; medium to large; no apple more beautiful; solid, deep red, almost black; flesh yellowish, firm, crisp, rich, juicy, mild, subacid; cooking and dessert; very good; popular market variety i southern California; bears young, heavily and regularly; fruit rarely blown off by wind.

V\*JONATHAN. A standard of quality and beauty among fall apples. American; medium to large; color like King David but hardly so dark; flesh yellowish-white, sometimes red tinged; firm, crisp, tender, juicy, very aromatic, sprightly subacid;

# "LONG LIVE THE BLIGHT, THE PEAR GROWERS' BEST FRIEND"

Random Notes on Some Points in Pear Culture and Blight Control

By A. L. WISKER

Published for FREE DISTRIBUTION By

#### LOMA RICA NURSERY

PEAR SPECIALISTS

Grass Valley,

California.

The pear, deemed by many the most delicious product of the orchard, and in California unsurpassed for commercial profit by any other, is represented in its natural and unimproved state by a number of different species, native to Europe and Asia. At least thirty of these have been recognized by botanists, some of them so diverse in appearance and unlike the typical pear tree that the casual observer would be apt to class them with the apple, the willow, or the olive, rather than the pear.

#### MOST ADAPTABLE OF FRUITS.

With so many species represented, originating in widely separated parts of the globe and under the most extreme conditions of soil and climate, it is but natural that this fruit should find no inherent difficulty in adapting itself to the wide variation of conditions found throughout the temperate zone. Indeed, so adaptable is the pear, that within the United States it would probably become the most widely distributed of all fruits, were it not for pear blight, since its range of adaptability is materially broader than the apple, the so-called "universal fruit."

#### BLIGHT—THE GREAT MENACE.

Blight (bacillus amylovorus) is a bacterial disease working within the tissues of the tree, confining itself to the sap wood, cambium layer, and inner bark. The most careful research of the greatest horticultural pathologists has absolutely failed to discover any remedial agent or any cure for the disease after the tissues of the tree are invaded by the bacteria, although cutting off the infected parts usually saves the tree.

When a bacterial invasion of the tissues occurs, it sometimes happens that natural conditions are not favorable to the extension of the disease and it becomes self-limiting by drying up and dying out. Usually, however, the blight bacteria multiply with great rapidity, the infected bark emitting a sirupy exudate literally teeming with them, which by insect or mechanical means are distributed from branch to branch and from tree to tree, until within a short time after the initial infection a tree or an orchard may be seriously injured or practically destroyed.

#### BLIGHT CONTROL PROCEDURE.

If the blight attack is discovered in its early stages, control is not difficult if all infected tissue—whether in branch, trunk, or root—is

thoroughly cut away and proper disinfectants applied to cut surfaces and to tools used, all parts cut away being carefully gathered up and burned to prevent insects and birds from carrying infection to other trees.

This apparently-simple means of control often fails to accomplish its object, because of the difficulty of obtaining men intelligent enough and careful enough to carry into effect in the orchard the antiseptic methods of the most careful surgeon in the operating room. The slightest failure to enforce these precautions may render the work valueless.

#### MEDICATION AND SPRAYING DO NOT CURE.

Medication—such as spraying the tree or placing any sort of material about the roots or in holes bored into the wood—is absolutely without effect upon the disease, while cutting out is frequently not done thoroughly enough to eradicate it at once and is more or less difficult of being properly carried into effect. Spraying, it should be understood, is of material value in controlling some of the insects that serve as distributing and inoculating agents, but has no direct effect upon the disease itself.

#### SOME PREVENTATIVE SUGGESTIONS.

Preventative measures therefore become of prime importance, since they much reduce the natural tendency of the tree to develop the disease.

ANY METHOD OF CULTURE, IRRIGATION, FERTILIZING, OR PRUNING THAT TENDS TO CREATE AN EXCESSIVE GROWTH OF COARSE, SOFT, SAPPY, SUCCULENT WOOD RENDERS THE PEAR TREE MOST SUSCEPTIBLE TO INFECTION BY BLIGHT, and at the same time makes the disease most destructive and harder to control when once established in a tree. On the other hand, cultural methods and a system of pruning that leads to a moderate growth of firm, close-grained wood that quickly matures, LESSEN THE DANGER FROM BLIGHT.

For this reason, pear orchards grown on land low in fertility and deficient in moisture, seldom suffer from blight. Neglected orchards and those where an intercrop—such as alfalfa—takes much of the moisture, are in a condition unfavorable to a bad attack of this disease.

From the foregoing, it will be easy to understand why the fertile, moist lands of certain valleys of the state furnish conditions that predispose pear trees to attacks of blight. These observations should furnish a clue, that will enable each pear grower to work out a radical program of orchard practice that will bring about conditions in the tree itself unfavorable to blight infection, or to the rapid spread of blight within the tree from any infection point. Blight travels rapidly in coarse, rank growth and more slowly in wood that is better matured, less succulent, and firm. It is not improbable that microscopic examination of the wood cells might disclose some relation between wood textures and the rapidity of blight-extensions within the tissues.

#### CERTAIN VARIETIES RESISTANT.

In districts apt to be visited by blight, certain -blight-resistant varieties may be planted with a fair degree of safety, when the planting of blight-susceptible sorts might involve considerable risk.

Of the commercial varieties grown on the Pacific Coast, Comice, Anjou, Seckel, and Winter Nelis, are markedly resistant—particularly

the first three—while Bartlett, Howell, and Bosc blight much more readily. The new candidate for favor—Forelle—has the same disadvantage.

When consideration is given to the fact that about 6,000 varieties are mentioned by name in the annals of American horticulture, the probability is at once suggested that many other desirable varieties will eventually be added to the blight-resistant list, but it must be remembered that at least 99 per cent of all varieties and 100 per cent of those that are most desirable belong to one species, and that species one of the most blight-susceptible—pyrus communis, the wild pear of Europe, by nurserymen commonly called the French-pear and largely used by them as a root upon which the commercial varieties are budded.

If our desirable varieties were descended from the wild pear of Asia (pyrus sinensis) which is so nearly blight-proof, the task would be easier. The Southern Oregon Agricultural Station, Yalent, Oregon, in charge of Prof. F. C. Reimer, is now observing several hundred varieties to determine their blight resistance.

#### CONTROLLING ROOT BLIGHT EXPENSIVE.

In all efforts to control blight by cutting out the diseased tissue, the cost of thus eradicating it from the underground parts has been high—often amounting to \$5.00 per tree in a bad case of root blight. It therefore becomes a matter of fundamental importance that the first step in an intelligent system of blight control should relate to preventing its attacking the root of the tree; and it naturally follows that the discovery of a non-blighting root is a matter of even greater moment.

#### NON-BLIGHTING ROOTS.

The rapidly-growing use of the blight-resistant Japan seedling (pyrus sinensis and other related species) upon which to bud the commercial varieties, as a substitute for the blight-susceptible French seedling so long in use, gives the orchardist a tree which it is believed practically eliminates this part of the danger and expense of the blight problem. Professor Reimer's experiment, at the agricultural station at Talent, Oregon, in inoculating with the blight bacteria the roots of French and Japan seedlings in adjoining rows, resulted in destroying 100 per cent of the French seedlings without producing a single case of blight in the Japan. This root has the further advantage of resisting the ravages of the pear root aphis—a pest that in many districts does more damage than blight. In addition to these advantages, trees grown on Japan root are noticeable for their strength and vigor, and after 30 years' test in the Southern states have been found satisfactory in every way. That this root will entirely take the place of the French on the Pacific Coast at an early date is a fact that cannot be doubted, particularly in California and Oregon, where the advantages of the Japan root have been so thoroughly made known that many well informed orchardists now decline to plant pear trees grown on any other root.

#### REIMER CONDEMNS FRENCH ROOT.

Professor Reimer, whose work in certain lines of blight-investigation is the greatest ever accomplished, stated in a lecture to the Pacific Coast Nurserymen's Association convention at Medford last June that nurserymen owed it to the orchardists of the Pacific Coast to at once discontinue the use of the French root, since it added so greatly to the difficulty of blight-control.

One of its worst faults is its habit of sending up suckers from the root, which blight readily and speedily carry the disease to the most vulnerable and the most important part of the tree. It thus often happens that a tree is infected in the root past all hope of relief before the orchardist realizes the presence of the disease. So convincing was the array of evidence presented by Professor Reimer during his lecture and at the experiment station, that no doubt remained in the minds of nurserymen present as to the wisdom of his advice, and the exhibit of trees grown at the station on the Japan root was no less convincing as to this being in every sense a wholly desirable successor to the French root.

#### JAPAN ROOT DOES NOT CHANGE TOP.

It should be borne in mind that the Japan root will not change the character of the tree above the bud union and that no probability exists that any root will have such an effect to any marked degree. Trees with blight-proof roots do not become blight-proof in the Bartlett top, and all usual precautions must be observed against blight above ground. The Japan root is merely a life insurance policy on the underground parts of the tree—but it will not take the place of good orchard practice and thoroughly efficient control measures.

#### BLIGHT RESPONSIBLE FOR BIG PROFITS.

This is as it should be, since the great profits of pear growing would speedily disappear if blight were at once eliminated and the fruit grown in quantity all over the United States. So long as blight continues, successful pear culture will be confined to localities where blight does not become virulent, or where able and progressive men wage a never-ending warefare and keep it wholly under control.

This condition eliminates the ron-progressive grower and the man who plants a pear orchard in the wrong locality, thus automatically checking over-production. At the same time, full measure of success is assured to the competent and efficient orchardist whose good fortune it has been to choose the right locality. Big profits and blight must ever go hand-in-hand; therefore "Long Live the Blight, the Year-Growers' Best Friend!"

#### BLIGHT-CONTROL BOILED DOWN.

Control of the blight situation in California may be boiled down to an observance of the following points:

- 1. The selection of localities where natural conditions tend to check the rapid spread of the disease if infection occurs.
- 2. Careful observance of such methods of orchard practice as will at all times avoid over-stimulation of the individual tree---particularly after bearing age is reached.
- 3. Thorough inspection of orchards during the entire year, and the adoption of absolutely thorough methods of cutting out and disinfecting every diseased part, if blight is found, including disinfection of tools after every cut. In this connection it may be said that bi-chloride of mercury solution, strength 1 to 1,000, is the best disinfectant.
- 4. The selection of blight-resistant varieties, so far as commercial requirements will allow.
- 5. Rejection of all nursery stock not grown on blight-resistant roots.

Considerable latitude may be exercised in the observance of the first suggestion, but the second, third and fifth cannot be ignored without disastrous results.

#### LOMA RICA NURSERY, GRASS VALLEY, CALIF.

cooking and dessert; very good to best quality; tree bears young and regularly; fruit sometimes drops considerably and may "spot" if held long in storage.

- \*GRIMES (Grimes Golden). Unex-celled in quality by any other fall size; apple. American; medium rich, golden yellow, with russet white PEARMAIN (White Windows; flesh yellow, very firm, tender, crisp, moderately coarse, juicy. subacid, rich, aromatic; cooking and dessert; very good to best is quality; blooms late, bears well; bears young; does not "hold well in storage.
  - \*DELICIOUS. A fall or early winter variety of striking appearance and flavor. American; large to and overlaid with bright and dark red, almost black at times; flesh firm, fine, tender, juicy, sweet, mild subacid, crisp, flavor like a blend of pineapple, banana and apple, unlike any other; dessert only; very good to best in flavor; strong grower; hardy, late bloomer; does fair-ly well in hot climate; fruit kept in an open shed at Grass Valley had not started to decay May 10th, but its fine quality deteriorates rapidly unless placed in cold storage immediately after harvesting.
  - YELLOW BELLEFLOWER. known early winter apple. American; large to very large; pronounced yellow color often blushed on one side; flesh pale, whitish-yellow, firm, crisp, rather tender, juicy, aromatic; cooking and des-sert; very good; successful com-mercially in but few localities and less popular than formerly.
- \*BANANA (Winter). Late fall apple of great beauty and fine flavor. American; large; clear, pale yellow, with beautiful pinkish-red cheek; flesh whitish-yellow, tender, juicy, somewhat crisp, mild subacid, dis-tinctly aromatic; dessert only; very good; fruit a little tender for long shipment, fine for nearby markets; bears young and regularly.
  - \*RHODE ISLAND GREENING. Best late fall cooking apple. American; large; green to greenish yellow, rarely blushed; flesh yellowish, flesh yellowish, firm, moderately fine-grained, crisp tender, juicy, rich, sprightly subacid; quite good as a dessert apple; somewhat slow starting to bear but is a fairly reliable cropper.
  - \*ESOPUS (Spitzenberg). Winter apple of highest quality. American; medium to large; deep yellow, almost covered with bright to dark red when well colored, marked

with yellow and russet dots; flesh tinged with yellow, firm, moderately fine, crisp, fairly tender, juicy, aromatic, sprightly subacid; cooking and dessert; very good to best: tree slender, weak grower, subject to fungus attacks and blight; variable in bearing habit; succeeds in relatively few localities.

- ter Pearmain). Desirable winter apple. American; medium pale yellow, sometimes blushed with brownish red; flesh slightly tinged with yellow; firm, fine-grained, crisp, tender, juicy, mild subacid, sprightly, pleasantly aromatic; a dessert apple of best quality; usually bears well.
- very large; greenish yellow, striped \*ROME (Rome Beauty). Good cooking apple and good keeper. American; medium to large; yellowish green, mottled, striped or overlaid with red, occasionally spotted with patches nearly black in color; flesh whitish with slight tinge of yellow or green, firm, a little coarse, rather crisp, juicy, mild subacid; rather low quality as a dessert apple, in fair demand for late markets; bears young and regularly; one or the last to blossom.
  - WINESAP. Valuable \*STAYMAN late winter apple. American; medium to large; yellowish, often nearly covered witht dull red and in distinctly striped with dull carmin russet dots often conspicuous; flesh tinged yellowish or greenish, firm moderately rather fine crisp, juicy, fine-grained, aromatic, sprightly pleasantly subacid; very good for dessert or cooking; tree bears young; regular cropper; succeeds everywhere, even in warm locations.
  - \*YELLOW NEWTOWN (Albemarle Pippin). Standard late yellow market variety of best quality. erican; medium to large; Ambright yellow, often with distinct pink blush; flesh yellow, firm, crisp, tender, rather fine- grained, juicy, sprightly, subacid, highly aromatic, unexcelled for cooking and dessert; fairly dependable cropper but slow starting to bear; succeeds in cer tain localities only; fine cider apple. \*WINESAP. One of the oldest hand
    - somest and best. American; medium to small unless heavily thin-ned; bright, deep red indistinctly striped and blotched with dark purplish red, over yellow ground color; flesh tinged with yellow veins, sometimes red; very firm, rather coarse, crisp, very juicy, sprightly subacid; excellent

#### LOMA RICA NURSERY, GRASS VALLEY. CALIF.

cooking or dessert and one of the best keepers; tree vigorous, young and regular bearer, always requiring thinning; adapted to warm climate.

#### APRICOTS.

- iety; medium size; bears very heav-
- \*BLENHEIM. In great demand for canning and drying; regular and \*RED heavy cropper.
- \*HEMSKIRKE. Largest heavy-yielding variety.

#### CHERRIES .

- \*CHAPMAN. One of the best early TRIUMPH, F. shipping varieties; large; purplish black.
- BLACK TARTARIAN. A standard Second-early variety of high qual-\*BLACK TARTARIAN. ity; good shipper and sells well; purplish black.
- \*LAMBERT. Mid-season, dark red, extra large; firm; fine quality; profitable shipper.
- Mid-season; very large; al-\*BING. most black; high quality; firm; one of the best shippers.
- Late: \*NAPOLEON (Royal Ann). best canning variety; good shipper; very large; pale yellow with bright red cheek; fine quality.
- AN (Lewelling, Very late black Black \*REPUBLICAN sort: Oregon). large; high quality; bears young and profusely.

NOTE-Nearly all cherries require cross-pollination to insure regular Black Tartarian and publican are said to be two of the best for this purpose.

### NECTARINES.

This delicious fruit should be in every family orchard where peaches \*HAUSS CLING.
will grow. Better dried than peaches peach of except and makes delicious marmalade.

Very large; bright \*HUMBOLDT. orange-yellow, crimson streaks.

\*STANWICK. Very large; skin pale shaded with violet; tender; juicy; best drying, shipping, and canning variety.

Our prices are fair, but we charge enough to put QUALITY into every sale, and we unqualifiedly guarantee satisfaction to every customer. Those home canning and preserves. who have bought our stock in the KRUMMEL. Best late, yellow freepast know how completely we satisfy every just complaint.

#### PEACHES.

(F. means freestone; C. cling; S. C. semi-cling).

MAYFLOWER, F. Earliest; hardy; striking appearance; red all over when well colored; excellent shipper; profitable.

\*ROYAL. Leading commercial var- GREENSBORO, S. C. About a week later than Mayflower; better quality; large; creamy white, with beautiful blush; ships well; hardy.

- BIRD, C. Early shipping peach of exceptional merit; good size; creamy white, brilliantly shaded with red; fragrant; quality best for its season. Extra firm; Eastern growers making big profits on Red Bird; ideal market variety for early districts.
- Large; yellow; handsome; quality fair, good market sort.
- Deep yellow with dark red cheek; flesh firm tut juicy; quality good; ships well. \*FOSTER, F. Large; yellow highly

colored with red; excellent for dessert and nearby markets.

- \*J. H. HALE, F. The best advertised peach in the world today. (Do not confuse with the old Hale's Early, an inferior sort). An impellow freestone. beautifully An immense ored with red; unusually firm and probably the best for midseason shipment, far excelling Elberta. which it precedes by a few days in time of ripening; juicy, good quality; skin practically free from fuzz. Our buds are cut from trees bought from the introducer direct. Or-chardists are warned that fraudulent substitutes are being offered in this territory and should take no chances; tree strong grower.
- \*TUSKENA (Tuscan Cling). Best early canning peach; large; high quality.

\*LOVELL, F. Best clear yellow free stone for drying and canning.

New canning peach of exceptional merit, ripening between Tuscan and Phillips: in strong demand by canners good prices; large; clear yellvery high quality. Plant heavily. StsQUEHANNA, F. Large; yello

Large; yellow nearly covered sweet; good. with red;

PHILLIPS CLING. Best late canning peach; large; clear yellow; commands top prices.

FATH CLING. Late, white cling of highest quality; a favorite for home canning and preserves. HEATH CLING.

stone; large; handsome; hardy; productive; ships well; sells well.

#### LOMA RICA NURSERY. GRASS VALLEY, CALIF.

### PEARS.

#### TRAITS AND PECU-VARIETAL LIARITIES.

Probably no variety is less exacting in its requirements as to soil and cultural conditions than Bartlett, and in the nursery it outgrows nearly al others. Because of its exuberant vigor and consequent rank growth where plant food and moisture ar abundant, it is among the most sus-ceptible to blight. Under ideal conditions it does not appear to demancross pollination to insure fruitful ness, but ideal conditions are so rarely realized that cross pollination always best. In a four-year pollination experiment we have increased the Bartlett crop in a test block : much as 700%—all other conditions remaining as before the beginning c pollinators is two rows of Comiec Anjou or Winter Nelis to six rows Bartlett. Bartlett is apt to fruit a year before the others mentioned being one of the earliest in this respect.

Anjou is one of the most desirable and profitable of shipping pears, but it grows more slowly than Bartlett and in poor soils requires more moisture and fertilizer until well established. Eventually it makes a better-shaped tree than Bartlett and is long-lived and productive. An Anjou tree in this (Nevada) county is credited with fifty successive crops. It makes its growth in the early part of the season and becomes dormant quite early in the fall. If fertilized, the application should be made carry is affected, this variety should never in the spring. In the nursery Anjou is affected, this variety should never grows tall and slender. The ideal be planted except on resistant roots, Summer pruning and cross-pollina Summer pruning and cross-pollina should be proposed in beinging Forelle. the application should be made early One of the best cold-storage varieties and in strong demand by the fancy trade.

Seckel is an upright, sturdy tree, but makes exceptionally slow growth. Blight-resistance seems generally to go hand-in-hand with slow growth. PEARS—Condensed Descriptions.
This variety is a good pollinator for MADELINE. Small; pale yellow; Bartlett. In the nursery it makes a "stocky" tree but is apt to fall short in height.

Another variety with similar habits of growth, although not so dwarfish, is Comice. Its tendency is to form an upright, narrow-headed tree, and the pruner must fight this peculiarity frem the start. Heading very low is recommended. Comes to bearing rather slowly. For this reason, summer pruning, instead of winter, is recommended, thus causing fruit

spurs to form at an earlier age. Crosspollination is absolutely essential, otherwise a very light cropper. Fruit always sold in half boxes, and at a higher average price than any other except Forelle-1916 sales reaching \$3.60 per half box.

Bosc makes a vigorous growth in the nursery but has a strong tendency to grow a crooked stem. makes a round-headed tree and usually occupies more space than Bartlett. Very fruitful when pollinated, Comice being among the best for this purpose. Sales were made during the season of 1916 at \$5.00 per box.

Winter Nelis is the despair of the pruner because of its sprawling, uncouth habit of growth. In the nursery, it is too slender and limber to sustain its own weight. For this reason we train to stakes, but even the test. Our recommendation for then seldom get perfectly straight stems. But for the high quality of the fruit, the faults of the tree would have cast it into the discard long ago. Probably needs pollination more than any other commercial variety, Comice or Bartlett serving well in this capacity.

Forelle makes a vigorous, upright growth in orchard or nursery, and in both bark and leaf has some resemblance to the apple. The recordbreaking price of \$8.95 per half-box on the New York auction in 1916 has created a heavy demand for the tree. For this reason, some orchardists may be tempted to buy Forelle on French roots, since the supply on blight-resistant roots is very small. However, as Forelle is apt to go down badly with blight wherever Bartlett is affected, this variety should never be planted except on resistant roots. tion are beneficial in bringing Forelle to heavy bearing, Howell being a desirable pollinator. With both For-elle and Howell, as with Bartlett, vigilant care must be constantly ex ercised to control blight.

tender, sweet, juicy; good quality; earliest market pear.

\*WILDER. Small to medium; yellow with red cheek; sweet; desirable

for early shipment. \*LAWSON (Comet). Medium large; yellow, covered with bright crimson; one of the most beautiful pears and a profitable early shipper.

\*BARTLETT. Leads all other varieties for shipping, canning and drying; large; yellow, often blushed;

#### **GRASS** VALLEY. CALIF. RICA NURSERY, LOMA

fine-grained, juicy, buttery, fumed, musky; most desirable main-crop pear; has but two faults -Bartlett blights badly and is not a good cold-storage sort.

- HOWELL. Large; yellow sometimes shaded red; smooth and attractive; juicy, sweet; very productive; blos soms early and therefore makes an ideal pollinator for Forelle.
- HARDY. Large; yellowish russet: sweet, juicy, rich; a good shipp at moderate prices.
- \*SECKEL. Small, brownish pear of highest quality. In good demand on many markets. No home orchard complete without Seckel.
- \*ANJOU. Large; greenish often blushed dull red, melting, sweet, juicy; very good; tree grows slowly but eventually becomes very large, with spreading, open head; one of the best of all shipping pears, selling at high prices and keeping well in cold storage. Sold at \$6.75 per box this season. Good pollinator to plant with Bartlett Resists blight.
- CLAIRGEAU. low, with brilliant red cheek; quality only fair but ships well and sells well on some markets; productive; blossoms early, with Howell and Forelle.
- \*DANA'S HOVEY (Winter Seckel). Medium small, yellowish-russet pear of superb quality; markets well in half boxes.
- Large; long-necked, cinnamon-russet pear of best quality; An addition to any home orchard. should find a place in every home \*EASTER BEURRE. The latest good orchard and is a most profitable variety; fine-grained, rich, sweet, buttery, delicious. Brought \$5.00 this season.
- \*COMICE. COMICE. A large, late, shipping pear, famous alike for its high quality and the high prices which commands-frequently always double that of Bartlett; greenish yellow, often faintly blushed; fine-grained, sweet, juicy, delicious; un-usually resistant to blight; good pollinator to interplant with Bart-This season sold at \$3.60 in lett. half boxes. In demand for cold storage.
- \*NELIS. One of the best known winter pears; medium; greenish russet; chard: very high quality; desirable home orchard and market. Tree a sprawling, uncouth grower and difficult to prune to shape.

- per- \*FORELLE. A shipping pear of medium size and great beauty; green-ish-yellow with shining red cheek speckled with brown spots like the side of a salmon trout; good quality and sells for fabulous prices to the fancy trade. Has sold for \$8.95 in half boxes on the New York auction market this season. usually vigorous. Particularly suited to the foothills, where its unusual coloring is most highly developed.
  - A. J. COOK. This new, late winter pear, only obtainable of Loma Rica Nursery, originated as a seedling of Bartlett in the orchard of J. E. Hassler, horticultural commissioner of El Dorado county. When samples of the fruit were first exhibited in Sacramento in 1915, one of the leading newspapers dubbed it the "Million-Dollar Pear." The pear has not been sufficiently tested to determine its commercial desirability, and we prefer to offer it solely on its merits, leaving it to the judgment of California's chardists to decide whether it shall find a permanent place after thor-ough testing in all sections.
- Large; greenish yel- A. J. Cook is medium to very large, shaped like Bartlett but hardly so smooth; color light yellow with some russeting; flesh coarser than Bartlett but flavor practically identical. Burbank compares it to Kieffer in texture and Bartlett in quality. Ripe at Grass Valley about Christmas. Should prove valuable for late markets.
  - Stock limited to a few hundred trees.

    An addition to any home orchard.
  - market pear, always in demand; large, good shipper, also desirable in every home orchard; delicious baked.

#### MORE PEARS FOR THE FAMILY ORCHARD.

Pears, earliest to latest. from should be a feature of every family orchard, yet too often the fruit-grower's family is unacquainted with any variety except Bartlett, in spite of the fact that there is a succession of varieties of this delicious fruit ripening all through the season. The following list is arranged in order of ripening and suggests a most desirable assortment for the Family Or-

Madeline Bartlett Seckel Bosc

#### LOMA RICA NURSERY, GRASS VALLEY. CALIF.

Dana's Hovey Winter Nelis A. J. Cook Easter Beurre

#### COMMERCIAL LIST.

The following varieties in the order of ripening are those in commercial demand for Eastern shipment. Those good qualit marked with a star (\*) sell for higher \*FORMOSA. average prices than Bartlett:

Wilder

Lawson (Comet)

Bartlett Howell

Hardy Seckel

\*Anjou

Clairgeau

\*Bosc

Dana's Hovey (Winter Seckel)

\*Comice

Winter Nelis \*Forelle

Easter Beurre

It is quite possible that A. J. Cook may be added to this list after it has heen more thoroughly tested. We are satisfied that it is better quality than Clairgeau. Its Bartlett flavor is so pronounced that it would rank near the top if it were not for some coarseness of texture around the core. However, in spite of this fact, its superior flavor may give it a good nearket standing, and it should fully tested in all pear districts. bc

## BLIGHT RESISTANT VARIETIES.

Arranged in the order of their resistance to blight, the following comvercial sorts are much more resist ant than Bartlett, Comice standing highest:

Comice Seckel Anjou Winter Nelis

## PLUMS AND PRUNES.

With most varieties of plums pollination is of greatest importance. In planting them be sure that two varieties bloom at the same time, that cross-pollination may result.

The proper root is also a matter requiring careful consideration. For the Japanese varieties, peach root gives excellent results. Some plums of excellent results. Some plums of the European type—Grand Duke and Diamond for instance—are unsatis-(French Prune)-make a good union of the Italian and the quality of the

with either peach or plum stock. We propagate accordingly.

BEAUTY. EAUTY. Largest early shipping plum; good quality; oval; crimson; tree vigorous and productive.

\*SANTA ROSA. One of the most profitable shipping plums; large; round; purplish crimson, good quality.

FORMOSA. Ships well and sells well; very large; heart shaped; light cherry-red; excellent; vigor-

ous, productive.

\*BURBANK. Standard shipping plum; large; round; reddish; good; very productive.

\*DIAMOND. One of the best for Eastern markets; very large; oval; bluish black; strong grower; productive; bloom stands frost well.

\*POND (Hungarian, Gros). One of the largest and most beautiful varieties and a favorite for Eastern shipment; reddish purple; bear. well if properly pollinated but otherwise is very capricious; quite sensitive to unfavorable weather blooming time.

\*AGEN (French Prune, Petite Prune) The standard drying prune of California, needing no description.

FRENCH PRUNE IMPROVED. The standard French prune in all but s.ze; much larger and sells for a gher price; very productive; bears regularly; doubles the value higher of a prune orchard.

\*GRAND DUKE. One of the latest and most profitable shipping plums; large; dark purple; bears regular-

ly and heavily.

PRESIDENT. Extra late; large, blue shipping plunt; good quality; new.

## NUT TREES.

#### ALMONDS.

Ne Plus Ultra, Nonpareil, Drake, Cross-pollination pays with the almond.

#### CHESTNUTS

Seedlings: Each Per 10 4 to 6 feet...... 50 \$4.00 U American Sweet, small but highest quality, magnificent shade tree; Italian, large but of lower quality, handsome tree for shade or avenue plant ing.

Grafted: Each Per 1º

#### LOMA RICA NURSERY, GRASS VALLEY, CALIF.

American Sweet. There is a great opportunity in growing this variety for market. Bears young, a heavy cropper, and the nut is in great demand at high prices. Adapted to dry soils and does not require rich Generally suited to foothill conditions. Shade and water carefully first season. Chestnuts stand freely and any information we pos-neglect when once established, but sess will be gladly given. Our inare easily killed by surburn the first vear.

#### WALNUTS.

#### Grafted on California Black:

Franquette, Mayette-late bloomers, high quality commercial nuts, very large.

Concord, Eureka—latest candidates for favor, very thrifty, producing large crops of fine nuts.

### BUSH FRUITS.

A good supply of bush fruits should be in every home garden. Those listed below will succeed throughout the state.

#### BLACKBERRIES.

Blowers, Snyder, Mersereau, Wilson are four of the best—all large, high quality, and productive.

Price per 10, 50c; per 100, \$3.50;

per 1000, \$25.00.

#### LOGANBERRIES.

Tip plants, same price as blackberries.

#### RASPBERRIES.

CUTHBERT. Large, good shipper, delicious, rich crimson. Price per 10, 50c; per 100, \$2.50; per 1000,

UMBERLAND. Best black, fine shipper, heavy bearer, high quality. Price per 10, 60c; per 100, \$20.00.

All our stock is WORTH OUR PRICE—and then some—and we stand behind everything we sell "'til the cows come home." CUMBERLAND.

SPECIAL—ST. REGIS. New, best ever-bearing, large, bright crimson, greatest cropper known, bears all summer, much better shipper than Cuthbert but hardly as fine flavor. Price per 10, \$1.00; per 100, \$4.00; per 1000, \$35.00.

#### GRAPES.

Muscat, Tokay, Thompson Seedless, Malaga, Cornichon. 15c each, \$1.00 per 10.

Eastern varieties: Campbell's Early, Worden, Delaware, Diamond, Bright-on. 20c each, \$1.50 per 10.

#### SERVICE DEPARTMENT.

Loma Rica Nursery will be glad to take up any horticultural problem with any orchardist at any time. stand ready to render any assistance that may be within our power. Our customers are urged to call upon us terest in our customers does not cease as long as they are working toward a better and more profitable practice of horticulture. On the other hand, we can receive help and instruction from the observant orchardists of the State, and will deeply appreciate hearing from them when any new or interesting condition comes under their notice. Let us all pull together for better methods of growing better fruit—and better profits for the man who grows it.

#### "PRUNINGS."

The man who lets a few cents pricedifference and a slick tree agent influence him in buying nursery stock always regrets it-about five years too late.

Five dollars per acre saved in the price of trees when planting an orchard often means \$100 per acre LOST when the trees reach bearing age.

Thoroughbred stock, good and QUALITY trees may cost a lit-tle more at the start, but think of the difference in VALUE RECEIVED.

Did you ever regret buying a good article?

We only expect to sell to those orchardists who know that no tree is TRULY cheap that is not also BEST.

## SPECIALS

## Japan Pear Seedlings

Some orchardists wish to plant Japan seedlings in their orchards, forming the main frame-work branches the first season and budding these branches to Bartlett and other commercial sorts in the fall. The result is a tree with root, trunk and main crotshes practically blight-proof. Where an orchardist possesses the requisite skill in budding or grafting he can thus reduce the blight danger to the minimum. Such trees are not procurable from nurseries at any price. We offer the seedlings, roots same age as one-year-old budded trees at the following prices:

A	grade	 \$5.00	per 100
В	grade	 3.75	per 100

## New Apple--Golden Winesap

Offered for first time by a California nursery. Introduced from Missouri and recommended by E. H. Favor as combining the high qualities of Yellow Newtown and Winesap. Described as a yellow apple of large size, fine quality, late keper, productive. We have just 50 trees and will not sell more than two to one purchaser. Sold in the East last year at \$1.00 per tree.

Price ......50c per tree

